

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002562**Date Inspected:** 14-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Xian Ping, See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** See Below**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector, M. Paul Stovall, was present at Zhenhua Port Machinery Company (ZPMC) on Changxing Island, Shanghai, China for the purpose of monitoring Quality Control (QC) functions during the fabrication of the Self Anchored Suspension (SAS) and Orthotropic Box Girder (OBG) sections of the San Francisco/Oakland Bay Bridge.

New Tower Shop**Bay 1**

The QA Inspector observed ZPMC personnel check flatness of various Tower Skin plates and lay out areas to be heat straightened. ZPMC personnel are machining bevel angles on plates SA287, SA334, P249, and P306 for Internal Diaphragm Plates using the horizontal mill.

OBG Pre-Assembly Area, Bay 2

The QA Inspector observed ZPMC personnel bolting Splice Connection Plates on the 114-meter Mock-Up.

Bay 3

The QA Inspector observed ZPMC personnel fit and tack weld WT stiffeners onto Side Plates (SP) SP146-001, SP119-001, and SP332-001. The ZPMC welders are Liang Yanhai, ID #066457, and Zhang Feng, ID #049769.

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The QA Inspector observed ZPMC personnel grind the flame cut faying surface and complete joint penetration splice welds on various WT stiffeners.

The QA Inspector observed ZPMC welding personnel He Yumei, ID #048625 and Li Zhaoqian, ID #048810 use the Flux Cored Arc Welding (FCAW) process to weld Complete Joint Penetration (CJP) welds on W21 x 57's. The work appeared to comply with the contract documents.

Bay 4

The QA Inspector observed ZPMC personnel working on Internal Tower Diaphragm Plate splice weld joint number SSD1-SA335-1A. ZPMC welding personnel had welded a piece of plate at each end of the weld joint to be used as a run-off tab. The QA Inspector observed the theses plates are one piece restraining the two pieces of plate forming the weld joint. ZPMC personnel began preheating the weld joint after fit up and tack welding in preparation to start production welding and observed two (2) tack welds in the weld joint and one (1) weld attaching a run-off tab had cracked. ZPMC stopped preheating; ground out the cracked tack welds and ZPMC QC personnel performed a Magnetic Particle Test (MT) to confirm the removal of the welds and/or cracks. The QA Inspector observed the MT inspection performed by QA appeared to comply with the contract requirements. The QA Inspector this shift observed no further welding or work.

Summary of Conversations:

The QA Inspector had conversations as noted within the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Stovall,Paul	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
